

Response

Applicant: Daniel J. Zillig et al.

Serial No.: 10/622,973

Filed: July 18, 2003

Docket No.: M120.143.101/58067US002

Title: CLEANING WIPE AND METHOD OF MANUFACTURE

REMARKS

This is responsive to the Non-Final Office Action mailed June 2, 2006. In that Office Action, the Examiner rejected claims 1-10, 17-24, 47, and 49 under 35 U.S.C. §102(b) as being anticipated by Willman et al., U.S. Publication No. 2002/0042962 ("Willman"). Claims 12-14 were rejected under 35 U.S.C. §102(b) as being anticipated by, or in the alternative under 35 U.S.C. §103(a) as being obvious over, Willman. Claims 1-10, 17-24, 47, and 49 were rejected under 35 U.S.C. §103(a) as being unpatentable over Reiterer et al., European Publication No. 0829222 ("Reiterer") in view of Willman. Claim 12-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Reiterer in view of Willman, and further in view of Truong et al., European Publication No. 1238621 ("Truong"). Claims 15, 16, 25-36, 51, and 52 were rejected under 35 U.S.C. §103(a) as being unpatentable over Reiterer in view of Willman and Truong, and further in view of Tanaka et al., European Publication No. 0822093 ("Tanaka").

With this Response, claims 1-36, 47, 49, 51, and 52 have not been amended, remain pending in the application, and are presented for reconsideration and allowance.

35 U.S.C. §§102, 103 Rejections

In rejecting claim 1 as being anticipated by Willman, the Office Action characterizes Willman as teaching a level of tacky material that is greater in an intermediate region of the fiber web than at the working surface thereof, and references paragraph 178 of Willman as supporting this position. Applicant respectfully disagrees. Willman describes in great detail the various materials and resultant properties associated with a polymeric additive provided with the cleaning sheet. In each and every instance, however, Willman makes clear that the polymeric additive (and thus the tacky material) is applied to the fiber sheet only after the sheet is completely formed (e.g., *Willman*, paragraphs 70, 165, 167, 180-184 where Willman consistently describes the polymeric additive being applied onto the fiber sheet). In this regard, Willman describes various techniques for applying the polymeric additive to the cleaning sheet at paragraphs 179-183 (e.g., rolling, slotting, spraying, etc.), all of which are in the context of the fibrous cleaning sheet being initially and completely formed (i.e., by the process of FIG. 24), and

Response

Applicant: Daniel J. Zillig et al.

Serial No.: 10/622,973

Filed: July 18, 2003

Docket No.: M120.143.101/58067US002

Title: CLEANING WIPE AND METHOD OF MANUFACTURE

then the polymeric adhesive applied. As a result, Willman is limited to application of the polymeric adhesive to an exterior of a completed fiber cleaning sheet (or fiber web), followed by saturation of the adhesive through a thickness thereof. Thus, Willman cannot be viewed as teaching the cleaning wipe of claim 1 and in particular a tacky material impregnated at a level that is greater in an intermediate region of the fiber web as compared to the working surface. At best, Willman may disclose a tacky material level that is uniform through a thickness of the fiber web (i.e., where the fiber web is fully saturated with tacky material); in all other instances of Willman, the level of tacky material must be greater at the working surface as compared to the intermediate region of the fiber web. This is in direct contrast to the limitations of claim 1.

Notably, Willman represents an attempt to address the same cleaning wipe problems identified and addressed by the pending application (e.g., excessive tacky material at the working surface and/or insufficient tacky material for adequate cleaning), but does so in an entirely different manner. More particularly, Willman's solution is to attempt to achieve a delicate balance between the level of additive on the cleaning sheet in combination with the selected additive materials. *Willman*, Abstract. Alternatively, or in addition, Willman creates a series of polymeric additive zones on an exterior of the cleaning sheet in an attempt to minimize glide resistance (*Willman*, para. 184-192) and/or a slip agent coating over the polymeric additive (*Willman*, para. 193). The pending application provides an entirely different solution not even considered, let alone taught, by Willman. More particularly, by providing a cleaning wipe having a tacky material level that is greater in an intermediate region of the fiber web as compared to the working surface, the cleaning wipe of claim 1 provides desired glide and cleaning properties without the need to carefully balance polymeric additive components and levels, and without the need for non-adhesive zones or slip agents.

In light of the above, it is respectfully submitted that the discussion at paragraph 178 of Willman does not teach the invention of claim 1. While Willman does describe that the polymeric additive may exist "inside" the sheet structure, this does not mean that the level of tacky material is greater "inside" the sheet structure. Paragraph 178 merely reflects the multiple considerations that Willman must take into account when attempting to balance the polymeric

Response

Applicant: Daniel J. Zillig et al.

Serial No.: 10/622,973

Filed: July 18, 2003

Docket No.: M120.143.101/58067US002

Title: CLEANING WIPE AND METHOD OF MANUFACTURE

additive components and coating levels. Because Willman makes clear that the polymeric additive is only applied onto an exterior of the completed fiber web, paragraph 178 cannot be viewed as teaching or suggesting the limitations of claim 1. To the extent paragraph 178 is viewed as teaching otherwise, it is then respectfully submitted that Willman does not constitute an enabling disclosure as once again, nothing in Willman describes a cleaning wipe having an enhanced level of tacky material in an interior of the fiber web as compared to the working surface thereof, let alone informs one of skill how to make such a cleaning wipe. To the contrary, Willman is limited to a cleaning wipe having a greater level of tacky material at the working surface as compared to an intermediate region thereof. For at least these reasons, then, it is respectfully submitted that claim 1 is allowable over Willman.

In rejecting claim 1 over Reiterer in view of Willman, the Office Action admits that Reiterer does not teach a higher level of tacky material at an interior of the fiber web, and instead relies upon Willman to provide this teaching. As described above, it is respectfully submitted that Willman does not teach an elevated level of tacky material at an interior of the fiber web. To the contrary, Willman is limited to either a uniform tacky material level throughout a thickness of the fiber web, or a tacky material that is greater at the working surface as compared to the intermediate region. Pointedly, the wipe manufacturing process described in Reiterer is essentially identical to that of Willman whereby the fiber web is first formed, and then the exterior surfaces thereof are subjected to a spray coating of a pressure sensitive adhesive. *Reiterer*, FIG. 2. As described above, this processing technique dictates that the resultant cleaning wipe cannot have a higher level of tacky material at an intermediate region of the fiber web as compares to a working surface thereof. Thus, because Willman and Reiterer either alone or in combination do not teach each and every element, claim 1 is not made obvious by Reiterer in view of Willman.

Claims 2-10, 17-24, 47, and 49 each depend from claim 1. As previously described, claim 1 is allowable over Willman alone, and Reiterer in view of Willman. Thus, claims 2-10, 17-24, 47, and 49 are similarly allowable. It is further noted that the limited teachings inherent to Willman and Reiterer as described above (e.g., Willman and Reiterer both being limited to

Response

Applicant: Daniel J. Zillig et al.

Serial No.: 10/622,973

Filed: July 18, 2003

Docket No.: M120.143.101/58067US002

Title: CLEANING WIPE AND METHOD OF MANUFACTURE

application of a tacky material to an exterior of a completed fiber web) dictates that each of at least claims 2-10 and 49 recite additionally allowable subject matter. Pointedly, it is respectfully noted that the ambiguous language of paragraph 178 of Willman cannot be viewed as meeting the specific limitations of claims 2-10 and 49. For example, Willman makes no mention of a tacky material gradient, let alone the tacky material gradient characteristics specifically set forth in claims 8-10.

Claims 12-14 depend from claim 1. As previously described, claim 1 recites allowable subject matter over Willman, as well as over Reiterer in view of Willman. For at least these same reasons, then, it is respectfully submitted that claims 12-14 are also allowable over Willman alone, and over Reiterer in view of Willman and further in view Truong. In this regard, it is respectfully noted that Truong does not address the noted deficiencies of Willman and Reiterer.

Claims 15 and 16 depend from claim 1 and thus, for at least the reasons provided above, recite allowable subject matter in that Tanaka does not teach the noted deficiencies. Further, Applicant respectfully re-asserts previous arguments that the calculations relied upon from Tanaka do not equate to the limitations of claims 15 and 16 in that the Tanaka adhesive “level” is based on a dry weight calculation. Further, it is respectfully noted that the rejections of claims 15 and 16 are based upon an asserted modification of Reiterer in view of Willman to purportedly achieve the elevated tacky material level at an interior of the fiber web. In order to modify Reiterer in the manner allegedly advanced by Willman, the teachings of Willman as a whole must be considered. With this in mind, Willman clearly limits the level of polymeric additives to be less than 10.0 g/m². *Willman*, paragraph 165. Importantly, Willman requires this relatively low tacky material level in order to provide desired handling and glide performance characteristics. The invention of claim 1, and thus of claims 15 and 16, represents a marked departure from this conventional approach. Because Willman teaches away from the combination asserted in rejecting claims 15 and 16, it is respectfully submitted that claims 15 and 16 recite additionally allowable subject matter. *MPEP* §2143.01 II.

Response

Applicant: Daniel J. Zillig et al.

Serial No.: 10/622,973

Filed: July 18, 2003

Docket No.: M120.143.101/58067US002

Title: CLEANING WIPE AND METHOD OF MANUFACTURE

Similar distinctions exist with respect to independent claim 25. As a starting point, the rejection of claim 25 is based upon Reiterer in view of Willman and Truong, and further in view of Tanaka. In this regard, the rejection (*Office Action*, pg. 7, para. 7) references Reiterer in view of Willman and Truong as applied to claim 13; it is assumed that this is in reference to the limitation in claim 25 of “a Drag Value of not more than 5 pounds.” With respect to this rejection of claim 13, the Office Action relies upon Truong as teaching Drag Values ranging from 1.25 to 3.33 N, and cites paragraph 58 of Truong in support of this alleged teaching. While Truong does describe a microfiber web, the web construction is limited to either fiber material alone, or fiber materials to which abrasive particles are adhered via a hardened binder. Thus, the binder/adhesive of Truong is not employed to retain contaminants during cleaning, but instead to present an abrasive to the surface for being cleaned. This is in direct opposition to the teachings and usages of the webs of Reiterer and Willman, whereby a pressure sensitive adhesive is adhesively exposed for collecting contaminants. In light of this difference, then, it is respectfully submitted that the Drag Values produced in paragraph 58 of Truong have no bearing on the cleaning wipes described in Reiterer and Willman. In other words, Willman specifically recognizes that while beneficial, an exposed, tacky surface will inherently reduce glide, and thus increase the corresponding Drag Value. Truong, on the other hand, is entirely unconcerned with the possible ramifications of an exposed tacky surface on glide (or drag), as none is present. As a result, a suggestion to modify Reiterer/Willman in view of Truong to achieve the Drag Value of claim 25 does not exist; or, if Reiterer/Willman were modified, Truong effectively teaches that the exposed tacky material be eliminated, in direct opposition to the requirements of Reiterer/Willman. In addition, and in light of these disparate teachings, it is respectfully submitted that a requisite likelihood of success in achieving the proffered combination does not exist in that Reiterer/Willman have an exposed tacky material and Truong does not. *MPEP* §2143.02. For at least this reason, then, claim 25 recites allowable subject matter. Further, and as described above, Willman teaches away from a tacky material impregnated into the fiber web at a level of greater than 10 g/m². Thus, a requisite suggestion to modify the combination of

Response

Applicant: Daniel J. Zillig et al.

Serial No.: 10/622,973

Filed: July 18, 2003

Docket No.: M120.143.101/58067US002

Title: CLEANING WIPE AND METHOD OF MANUFACTURE

Reiterer as modified by Willman and further in view of Tanaka does not exist. As such, it is respectfully submitted that claim 25 recites allowable subject matter.

Claims 26-36, 51, and 52 depend from claim 25 and thus, for at least the reasons above, are allowable over the cited references. In addition, it is respectfully submitted that for at least the reasons provided above with respect to claim 1, at least claims 32-34, 51, and 52 recite additionally allowable subject matter not otherwise taught or suggested by any of the cited references.

CONCLUSION

In view of the above, the Applicant respectfully submits that pending claims 1-36, 47, 49, 51, and 52 are in a condition for allowance. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-36, 47, 49, 51, and 52 are respectfully requested.

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 50-0471.

The Examiner is invited to telephone the Applicant's representative at the below-listed numbers to facilitate prosecution of this application. Any inquiry regarding this Response should be directed to Timothy A. Czaja at Telephone No. (612) 573-2004, Facsimile No. (612) 573-2005 or Rick L. Franzen at Telephone No. (651) 736-6432, Facsimile No. (651) 736-7586. In addition, all correspondence should continue to be directed to the following address:

Response

Applicant: Daniel J. Zillig et al.

Serial No.: 10/622,973

Filed: July 18, 2003

Docket No.: M120.143.101/58067US002

Title: CLEANING WIPE AND METHOD OF MANUFACTURE

3M Innovative Properties Company

PO Box 33427

St. Paul, MN 55133-3427

Respectfully submitted,

Daniel J. Zillig et al.,

By their attorneys,

DICKE, BILLIG & CZAJA, PLLC

Fifth Street Towers, Suite 2250

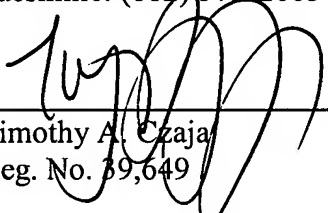
100 South Fifth Street

Minneapolis, MN 55402

Telephone: (612) 573-2004

Facsimile: (612) 573-2005

Date: SEPTEMBER 1, 2006
TAC:jmc



Timothy A. Czaja
Reg. No. 39,649

CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 1st day of September, 2006.

By: 

Name: Timothy A. Czaja